

REMARKS

Claims 20-41 are pending in the application, new claim 41 having been added by the present amendment. Reconsideration and withdrawal of the rejections in view of the following remarks is kindly requested.

Summary of Examiner Interview

Initially, Applicants' representative wishes to thank Examiners Williams for his time and effort at the Interview of June 13, 2006, the content of which is summarized below.

Prior to the Interview, Applicants' representative faxed the Examiner some proposed discussion points for the Interview. At the interview, Applicants' representative discussed the invention and the references applied and also suggested some potential claim terminology which appeared to define over the references.

After a discussion, the Examiner suggested some revisions to the claims to further distinguish what the Examiner believes to be the most relevant prior art regarding a single audible indication (Kazarian, Jr.), and indicated on the Examiner Interview Summary form that claim amendments are arguments as to this feature would be considered.

Accordingly, Applicants have filed amendments consistent with what was discussed in the interview in this reply, and kindly request the Examiner to withdraw the art rejections based on the clarifying amendments herein.

Double Patenting

Claims 23 – 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5, 6, 8 – 10, and 12 – 15 respectively of U.S. Patent No. 6,648,105 (Lang). Applicants shall submit a terminal disclaimer once the other claims of this application have been found otherwise allowable.

Rejections Under 35 U.S.C. § 102

Claims 25, 27-31 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Strait (U.S. Pat. No. 5,588,335). This rejection is respectfully traversed.

Applicants that Strait fails to teach or suggest a brake system for a vehicle comprising, at least a locking mechanism for providing a single locked position for said brake pedal, said locking mechanism providing only a single distinctive clicking sound caused by a sharp metal-to-metal contact in the locking mechanism, informing an operator that said brake pedal had been depressed into a position to be latched in said single locked position, in combination with the other features or structural correlation recited in claim 25, and as somewhat similarly recited in claim 27.

In the present application, when the parking mode is engaged, brake system 50 generates a single audible click or pop sound. The sound indicates that the parking mode has been properly engaged by the operator. The benefit of a single audible sound is to provide a clear indication that the parking mode has been engaged.

As described in paragraphs [0066]-[0067] and referring to FIGS. 5 and 7, the end of service braking lug 166 on the swing arm 112 clears the second leg 160 of the toggle arm 156 (see FIG. 7) so that the swing arm 112 drops through an arc to a position in which the cam 125 engages the lug 122 on the control arm 110 (see FIG. 5 exploded view for this). This delayed dropping of swing arm 112 permits the dog 124 and cam 125 on swing arm 112 (FIG. 5) to clear the detents 118 and 120 and the control arm dog 122 on the control arm 110, so as to prevent a false audible indication of brake pedal locking.

The solid contact between the cam 125 and the dog 122 that occurs when the swing arm 112 drops into place produces a distinctive "clicking" sound that provides an audible indication to the operator that the brake pedal 80 has moved into a position in which it can be locked. This is the single audible click, cam 125 on control arm dog 122 contact due to the swinging arc motion causing the sharp contact.

In Strait, FIGS. 1-3, col. 3, line 64 to col. 4, line 6; and col. 4, line 52 describes the locking structure, and col. 5, line 23 describes how the locking mechanism operates. The parking brake configuration of Strait provides ratcheting gears operable to provide multiple audible indications during use, and providing multiple locked positions.

For example, and with reference to the above passages, a sector ratchet 46 having a plurality of rotating teeth sequentially engage tooth 54 provided on a lock pawl 48 upon pivotal movement of operator lever 18. As a result, an audible signal is emitted with each progressive contact of the tooth 54 along the series of teeth on the sector ratchet 46. This contact will thus make multiple sequential audible clicks, as is well known in the prior art. Strait is silent as to a locking mechanism providing only a single distinctive clicking sound caused by a sharp metal-to-metal contact in the locking mechanism, informing an operator that said brake pedal had been depressed into a position to be latched in said single locked position. For at least these reasons, Applicants submit that Strait fails to teach or suggest each and every feature of the claims. Withdrawal of the rejection is kindly requested.

Claims 20, 22, 23, 25, 27-32, 34, 35 and 37-40 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by White III et al. (U.S. Pat. No. 6,092,617). This rejection is respectfully traversed.

Each of the independent claims has been similarly amended; thus the arguments for claims 20 are applicable to these other independent claims.

White too fails to teach or suggest a brake pedal locking mechanism providing only a single distinctive clicking sound caused by a sharp metal-to-metal contact in the locking mechanism, informing an operator that said brake pedal had been depressed into a position to be latched in said single locked position.

FIG. 2 in White shows the difference, and also col. 6, lines 3-42, which is the only passage in White which describes the locking mechanism operation. Referring to FIG. 2, White has a brake bellcrank 56 linked by a front brake link arm 72 to the brake pedal 74. Bellcrank 56 that may be selectively operated to stop the vehicle 4. The front arm of the brake bellcrank 56 is provided with a plurality of sawteeth 64.

For example, when the operator pushes down on the brake pedal 74, the brake bellcrank 56 is rotated in a direction that would reset an accelerator linkage 28 and an input lever 20 on a speed changing system 18 to neutral. As the brake pedal 74 is depressed to actuate the vehicle's brakes and to place the brake bellcrank 56 in the position shown in FIG. 2, the sawteeth 64 engage a locking edge 66 on a parking brake

68. The parking brake 68 can then be set such that its locking edge 66 is engaged with one of the sawteeth 64. In this way, an audible signal is emitted with each progression of the sawteeth 64 along the locking edge 66.

The text and figures in White do not indicate that only a single tooth is needed to engage a single edge 66 to provide a single distinctive clicking sound which reflects the proper single locked position. As in Strait, an audible signal would be emitted with each progressive contact of the teeth 64 contacting the locking edge 66. This contact will thus make multiple sequential audible clicks, as is well known in the prior art. Moreover, the fact that there are multiple teeth 64 indicates that there are multiple locked positions of a given tooth 64 against locking edge 66, and hence no single locked position as recited in the claims. Withdrawal of the rejection is kindly requested.

Rejections Under 35 U.S.C. § 103

Claims 20, 22 and 23 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Strait. This rejection is respectfully traversed.

Strait is silent as to a locking mechanism providing only a single distinctive clicking sound caused by a sharp metal-to-metal contact in the locking mechanism, informing an operator that said brake pedal had been depressed into a position to be latched in said single locked position. As discussed above regarding claim 25, the parking brake configuration of Strait provides ratcheting gears operable to provide multiple audible indications during use, and providing multiple locked positions.

For at least these reasons, Applicants submit that Strait fails to teach or suggest each and every feature of claims 20, 22 and 23. Withdrawal of the rejection is kindly requested.

Claims 21, 24, 26, 33, and 36 stand rejected under 35 U.S.C. § 102(a) as being unpatentable over Strait or White III et al. in view of Kazarian, Jr. (U.S. Pat. No. 4,310,064). This rejection is respectfully traversed.

Initially, claims 21, 24, 26, 33 and 36 are at least submitted to be allowable by virtue of being dependent off an allowable independent claim. Further, Kazarian, Jr is limited in its teachings and fails to cure the deficiencies present in Strait or White. In the

interview, the Examiner had argued that Kazarian, Jr. shows a single locked position as between a cam edge 78 and a lock edge 80 (see FIGS. 3-5). While that may be true, Kazarian is completely silent as to whether its locking mechanism provides only a single distinctive clicking sound caused by a sharp metal-to-metal contact in the locking mechanism. A review of Kazarian, col. 4, lines 19-33, paraphrased below, indicates that this feature is lacking in Kazarian.

In Kazarian, a pin engages a curved cam portion 78 of the latch and rotates the cam portion clockwise and downward toward the solid line position of FIG. 4. As the brake pedal 24 is moved to the substantially floored position, the pin 96 will continue to engage cam edge 78 and rotate the latch 56 clockwise until the pin 96 passes the lock edge 80, at which time the spring 64 will force the latch 56 back to the solid line positions of FIGS. 3 and 5. In the solid line brake-locked position of FIG. 5, with the pin 96 behind the locking edge 80, the brake pedal 24 cannot return from its depressed (floored) position to its free position, and the hydraulic service brake is thus locked in the brake-on position.

This passage says nothing about creating a single distinctive clicking sound by a sharp metal-to-metal contact in the locking mechanism, only that a pin 96 travels with a cam edge 78 of the latch 56 until passing the lock edge 80, after which spring 64 forces latch 56 back to its position as shown in FIGS. 3 and 5. For at least the above noted reasons, withdrawal of the rejection is kindly requested.

New Claim

As discussed in the interview, Applicants have added a new claim to further describe how the distinctive clicking sound is generated. As described above, the solid contact between the cam 125 and the dog 122 that occurs when the swing arm 112 drops into place produces a distinctive "clicking" sound that provides an audible indication to the operator that the brake pedal 80 has moved into a position in which it can be locked. This is the single audible click, cam 125's sharp contact with the control arm dog 122 due to the swinging arc motion of the swing arm 112. Applicants submit that claim 41 is not taught by any of the art of record.

CONCLUSION

Accordingly, in view of the above remarks and amendments, reconsideration of all outstanding rejections and allowance of each of claims 20-41 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant hereby petitions for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$120.00 extension fee herewith.

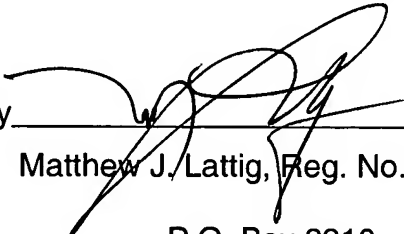
If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned at (703) 668-8026 (direct).

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §1.16 or under §1.17; particularly, extension of time fees.

Very truly yours,

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